

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (cancelled).

Claim 2 (currently amended): A method according to claim ~~1~~, ~~in which the moved~~ 22, wherein the moving bed closed dryer ~~(2)~~ ~~consists of~~ comprises an agitated vessel having at least one agitating shaft, ~~such wherein the shaft(s) being~~ shaft is heated ~~additionally to the vessel~~ to increase the heat transfer and drying efficiency of the dryer.

Claim 3 (currently amended): A method according to claim 2, ~~in which the~~ wherein drying of the polymer gel is carried out under at least one of the following conditions vacuum ~~or in the presence of~~ , heated air, inert gas, and steam ~~or a combination thereof, preferably under vacuum~~.

Claim 4 (currently amended): A method according to claim ~~1 and 2~~, ~~in which the~~ 22, wherein maturity of the polymer, ~~i.e.~~ ~~reaction reaching very high conversion~~, is carried out ~~into the~~ in a first zone of the ~~moved bed~~ closed dryer ~~(2)~~.

Claim 5 (currently amended): A method according to claim 1, ~~in which the~~ 22, including mixing affect into either or both at least one of the closed ~~continuous~~ polymerization reactor (1) and the closed dryer (2) ~~could be used to incorporate, to the produced gel, one or more additional (co)monomers~~ an additive selected from the group consisting of monomers, additives (C) and comonomers solvents, or a combination and mixtures thereof.

Claim 6 (currently amended): A method according to claim 1, ~~in which the mixing effect into either or both~~ 22, including recycling to at least one of the closed ~~continuous~~ polymerization reactor (1) and the closed dryer (2) ~~could be used to incorporate, to the produced gel, the recycled dry dried SAP fines that exit from the continuous discharge system (DS) and the siever.~~

Claim 7 (currently amended): A method according to claim 1, ~~in which either or both~~ 22, including equipping at least one of the continuous closed polymerization reactor (1) and the closed dryer (2) ~~could be equipped with condensing and recycling systems of residual reactant(s)~~ reactants, solvent(s) solvents and additives or a combination thereof.

Claim 8 (currently amended): A method according to claim 7, ~~in which~~ including operating the condensing and recycling systems ~~of the continuous polymerization reactor (1) and the dryer (2)~~ could be operated in either in an independent or combined way.

Claim 9 (currently amended): A method according to claim 7, ~~in which~~ wherein the residual ~~reactant(s), solvent(s)~~ reactants, solvents and additives ~~or a combination thereof could be totally~~ or are at least partly recycled, ~~together or separately at one or more locations of the continuous production process of claim 1~~ to at least one of the closed polymerization reactor and the closed dryer.

Claim 10 (currently amended): A method according to claim ~~1~~, ~~in which~~ 22, wherein at least one of a pressure lock chamber ~~(7) or~~ and a gel cutting system ~~(5) or a combination thereof could be inserted~~ is located between the ~~continuous~~ closed polymerization reactor ~~(1)~~ and the closed dryer ~~(2)~~.

Claim 11 (currently amended): A method according to claim 10, ~~in which the type of~~ the pressure lock chamber ~~is of any type of commercially available pressure lock chambers preferably~~ selected from one of a rotary valve ~~or~~ and a piston lock system.

Claim 12 (currently amended): A method according to claim 10, ~~in which the pressure lock chamber could be used to incorporate, to the~~ including incorporating into a reaction mixture exiting the closed polymerization reactor, ~~one or more additional (co)monomers, additives and/or~~ at least one of monomers, comonomers and solvents or a combination thereof in the pressure lock chamber.

Claim 13 (currently amended): A method according to claim 10, ~~in which the type of wherein the gel cutting system is of any type of commercially available cutting systems, preferably the a~~ Urshell cutting system.

Claim 14 (currently amended): A method according to claim 10, ~~in which~~ including incorporating in the gel cutting system ~~could be used to incorporate one or more additional (co)monomers, additives~~ at least one of monomers, comonomers and solvents ~~or a combination thereof to the~~ a reaction mixture exiting the closed polymerization reactor.

Claim 15 (currently amended): A method according to claim 14, ~~in which the hydrated gel particles of a required size could be~~ continuously 22, wherein the polymer gel leaving the closed polymerization reactor is mixed in a mixer with at least one

additive for improving free-flowing and ~~eventually other~~  
properties ~~in a mixing screw or in a rotary mixer tube (6),~~  
~~which has a final portion with holes allowing the additive(s) to~~  
~~be recyeled~~ before entering the closed dryer (2).

Claim 16 (currently amended): A method according to claim ~~1 and~~  
~~18~~ 15, ~~in which wherein~~ the ~~continuous~~ closed polymerization  
reactor (1), the closed dryer (2) and ~~any device~~ the mixer  
between them ~~can function at equal~~ all operate at either the  
same pressure or different pressures.

Claim 17 (currently amended): A method according to claim 16, ~~in~~  
~~which wherein~~ the ~~continuous~~ closed polymerization reactor (1),  
the closed dryer (2) and ~~any device~~ the mixer between them  
~~function~~ operate under a vacuum ~~preferably at different degrees~~  
~~or vacuum~~.

Claim 18 (currently amended): A method according to claim 17 ~~and~~  
~~10, in which~~ , ~~wherein~~ the ~~degree of~~ vacuum ~~into~~ in the closed  
dryer (2) is lower, ~~preferably much lower~~ than ~~that in~~ the  
~~continuous~~ vacuum in the closed polymerization reactor (1) and  
the ~~other devices between them~~ mixer.

Claim 19 (currently amended): A method according to claim 18 ~~and 10~~, wherein in which when ~~the hot polymeric mixture enters~~ the closed dryer (2), ~~which is under much higher~~ is at a temperature ~~and degree of vacuum~~ higher than the closed polymerization reactor (1) and intermediate mixer devices, the polymer gel in the closed dryer is ~~readily~~ flashed leading to intensive evaporation of ~~solvent(s)~~ solvents and un-reacted components and hence to higher drying efficiency of the SAP, wherein the flash allows the SAP particles to be more porous and thus have an increased liquid absorption rate.

Claim 20 (currently amended): A method according to ~~claim 2 and 6~~, ~~in which the hot and dry~~ 22, wherein ~~the dried~~ SAP particles finer exiting the closed dryer (2) ~~can be~~ are partly cooled during their passage through ~~the~~ a jacketed continuous discharge system ~~(DS) such as cooling lock vessel or other systems~~.

Claim 21 (cancelled).

Claim 22 (new): A continuous process for the production of dried superabsorbent polymers (SAPs) comprising:

carrying out a polymerization reaction in a closed polymerization reactor to form a polymer gel, wherein the polymerization reaction is selected from the group consisting of

(1) bulk aqueous solution polymerization and (2) suspension polymerization;

drying the resulting polymer gel on a continuously moving bed in a closed dryer; and

discharging dried SAP fines.